NATIONAL WEATHER SERVICE PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)

TYPE: Official Product DATE: Feb. 02, 2003

ONE-MONTH CLIMATE OUTLOOK (CONTIGUOUS U.S. AND ALASKA)

Part 1 - Mission Connection

1. Product/Service Description:

The Climate Prediction Center (CPC) issues a probabilistic one-month temperature and precipitation outlook.

2. Purpose/Intented Use:

Since these outlooks pertain to the average temperature and total precipitation for the entire valid period and *not* to the variability within it, they will *not* help people planning events for specific dates or sub-periods. The outlooks will be of most use for economic and business planning, particularly when used with 30 year base period means.

3. Audience:

The Outlooks provide information to decision makers in weather and climate sensitive activities sensitive to inter-seasonal climate variation. (e.g. weather risk management, energy/utilities, agriculture, hydrology, etc.)

4. Presentation Format:

CPC presents the charts over NWS dissemination systems in red book graphic format and on the CPC web site.

5. Feedback Method:

E-mail both Robert.Leffler@noaa.gov and Barbara.Mayes@noaa.gov

Part 2 - Technical

1. Format and Science Basis:

CPC will express the outlooks in a 3-category probabilistic format as the chance the mean temperature or total precipitation for the period will fall into the most likely of three classes: above, below, or near normal. CPC defines the classes as climatologically equally likely: the top 10 cases of a thirty year record define the above category (A), the middle 10 cases define the normal category (N), and the bottom 10 cases defining the below category (B). For areas where a favored class cannot be determined, CPC will indicate those areas with a "EC." EC means equal chances for each of the three climatological classes for the outlook's valid period. For each of the thirteen three-month outlook periods (January through March, February through April, etc.), CPC uses the 30-year mean temperature and 30-year mean total precipitation for the climatology and class limits. CPC updates this information once per decade.

CPC will indicate the probability anomalies for the most likely class with solid contour lines. They will label the centers of maximum probability anomaly with the letters A, N, or B to denote the most likely class. For areas where a favored class cannot be determined. CPC will indicate those areas with a "EC" and not have contours. For example, if the probability for the above normal temperature class exceed 43 percent for a given area and is the most likely class, then CPC will encircle the area by a probability anormaly contour of 10 percent on the temperature outlook chart and label the area with the letter A.

The latest one-month outlook is at

http://www.cpc.ncep.noaa.gov/products/predictions/30day/

2. Availability:

These are scheduled products. CPC issues these outlooks simultaneously once a month on the third Thursday of the month around 3:00 p.m. Eastern local time. CPC does not issue updates or amendments. They will issue corrections as needed. CPC issues the outlooks on NWS dissemination systems under the following product IDs:

Lead time is indicated by the number in the WMO heading and last letter in the AWIPS ID. (i.e. 01 and A have a lead time of 0.5 month, 02 and B have a lead time of 1.5 months, etc.)

Temperature		Prediction	
WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
PTIV98 KWNC	RBG9MT	PEIV98 KWNC	RBG9ME

They are also issued on the CPC web site at the URL listed in section a.

3. Additional Information:

- <u>Valid Time</u>: CPC will issue the outlooks with a lead time of about month. For example, in mid-January, CPC will issue the One-Month Outlook for February.
- Product Expiration Time: The outlook expires at the beginning of the valid time of that outlook.
- <u>Creation Software</u>: CPC uses the General Meteorological Package (GEMPAK) software as an input into National Center Advanced Weather Interactive Processing System (NAWIPS).